

**ARCHAEOLOGICAL EVALUATION
OF PREHISTORIC SITES
CA-SDI-16,652 AND CA-SDI-16,653
WITHIN THE ROBNETT TENTATIVE
PARCEL MAP PROJECT,
SAN DIEGO COUNTY, CALIFORNIA
(TPM 20726, Log. No. 03-20-001)**

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October 2004

National Archaeological Data Base Information

Type of Study: Cultural Resource Testing and Evaluation Program

Sites: CA-SDI-16,652 (Robnett-2) and CA-SDI-16,653 (Robnett-3).

USGS Quadrangles: Barrett Lake and Dulzura 7.5'

Area: Less than 1-Acre.

Key Words: County of San Diego, Bratton Valley, Robnett Property, Testing and Evaluation Program, Bedrock Milling, Santiago Peak Volcanics, CA-SDI-16,652 (Robnett-2), and CA-SDI-16,653 (Robnett-3).

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ABSTRACT

Laguna Mountain Environmental, Inc. (Laguna Mountain) conducted an archaeological testing and evaluation program at prehistoric sites CA-SDI-16,652 and CA-SDI-16,653 for the proposed Robnett Tentative Parcel Map (TPM) Project. Archaeological testing included mapping, surface collection, and shovel test pit (STP) excavation.

Cultural resource work was conducted in accordance with the California Environmental Quality Act (CEQA) and the County of San Diego implementing regulations and guidelines including the County of San Diego Resource Protection Ordinance (RPO). The County of San Diego will serve as lead agency for the project and CEQA compliance.

A survey of the Robnett TPM Project identified three archaeological sites within the project area (Wade 2003). All three sites were bedrock milling stations with associated artifacts. Incorporation of these sites into open space easements, if possible, was recommended. Avoidance of site CA-SDI-16,651 (Robnett-1) was not feasible within the goals of the proposed project. This site was previously tested and recommended as not eligible for the California Register of Historical Places (California Register) (Pignuolo 2003). CA-SDI-16,652 (Robnett-2) and CA-SDI-16,653 (Robnett-3) were initially proposed for avoidance and placement in open space, but during finalization of project plans it was determined these sites could not be feasibly avoided.

A testing and evaluation program was conducted at sites CA-SDI-16,652 and CA-SDI-16,653 to evaluate these sites' eligibility for the California Register and their significance under the County RPO. Testing and site documentation included mapping and surface collection, and the excavation of 15 STPs. The testing program was conducted between August 10, and 31, 2004 by Mr. Andrew R. Pignuolo, RPA, Mr. John Dietler, RPA and Ms. Sara Dietler. Although brush was dense in portions of the sites, the cultural resources testing program adequately served to evaluate the site without significant constraints.

Testing and evaluation studies did not identify subsurface deposits at either of the two sites. CA-SDI-16,652 appears to represent a series of bedrock milling stations without time diagnostic artifacts. CA-SDI-16,653 was also a bedrock milling station, but a ceramic sherd was collected from the surface of the site suggesting Late Prehistoric use. Questions established in the research design could not be addressed with site data due to a lack of subsurface deposits at both sites, low integrity, lack of datable material, and limited amounts of cultural material. Photographs, artifacts, and project records from this testing program will be temporarily curated at Laguna Mountain until final curation arrangements can be made at the San Diego Archaeological Center or another appropriate regional repository.

Testing has evaluated CA-SDI-16,652 and CA-SDI-16,653 for California Register eligibility and significance under the County RPO. Both sites CA-SDI-16,652 and CA-SDI-16,653 lack the integrity and content needed to qualify as important and significant under these criteria. No further work is necessary to address these resources.

I. INTRODUCTION

A. Project Description

The proposed project is a minor subdivision and residential development of four parcels plus a remainder parcel. The proposed project is for residential land use. As part of the project, residential development including building pads, road, and utilities would be graded and excavated.

The project area is located in southern portion San Diego County within the Community of Deerhorn Valley in the County of San Diego (Figure 1). It is located in an area called Bratton Valley west of Barrett Lake and south west of Deerhorn Valley itself. The proposed subdivision is located at 2275 Honey Springs Road. The project is located in portions of Sections 22 and 23 in Township 17 South, Range 2 East. The project is limited to the proposed project area and does not include off-site improvements. The project area is shown on the Barrett Lake and Dulzura USGS 7.5' Quadrangles (Figure 2).

The testing and evaluation program was conducted pursuant to the California Environmental Quality Act (CEQA) as revised in 1998, and respective County of San Diego implementing regulations and guidelines including the County Resource Protection Ordinance (RPO). The County of San Diego will serve as lead agency for CEQA compliance. The testing and evaluation program was conducted to determine if sites CA-SDI-16,652 and CA-SDI-16,653 are eligible for inclusion in the California Register of Historic Resources (California Register) or significant under the County RPO.

B. Project Personnel

The cultural resource testing and evaluation program has been conducted by Laguna Mountain Environmental, Inc. (Laguna Mountain), whose cultural resources staff meet state and local requirements. Mr. Andrew R. Pignuolo served as Principal Investigator for the project. Mr. Pignuolo is a member of the Register of Professional Archaeologists (RPA; previously called SOPA) and meets the Secretary of the Interior's standards for qualified archaeologists. He is also on the County of San Diego's list of qualified archaeologists. Mr. Pignuolo has an MA in Anthropology from San Diego State University and has extensive experience in the San Diego region. The resume of the Principal Investigator is included in Appendix A.

Mr. John Dietler assisted in the field excavations and cataloguing of project material. Mr. Dietler is also a member of the RPA and meets the Secretary of the Interior's standards for qualified archaeologists. He has an MA in Anthropology from the University of California, Los Angeles and has over five years experience in the San Diego region. Ms. Sara Dietler assisted in the field excavations. Ms. Dietler has a BA in anthropology from San Diego State University and more than six years experience in the region.

Figure 1
Regional Location

Figure 2
Project Location

C. Structure of the Report

This report follows the State Historic Preservation Office's guidelines for Archaeological Resource Management Reports (ARMR). The report introduction provides a description of the project and associated personnel. Section II provides background on the project area and previous research. Section III describes the research design, and testing methods while Section IV describes the results including artifact analysis. Section V provides evaluation criteria and recommendations and Section VI includes the references cited.

II. NATURAL AND CULTURAL SETTING

The following environmental and cultural background provides a context for the cultural resource inventory.

A. Natural Setting

The project area is located in the southern portion of San Diego County within the foothills and interior valleys of the region. Two steep mountains, located northwest and south of the property, create a narrow gorge through which Pringle Creek exists Bratton Valley to the southwest. The project area straddles this narrow gorge and includes an elevated bench southeast of Pringle Creek. Elevations range from 1820 to 2360 feet above mean sea level (MSL). The property is largely undeveloped but includes one residence in the north central portion of the property and several graded roads.

The geomorphology of the project area is largely a product of the region's geologic history. During the Jurassic and late Cretaceous (>100 million years ago) a series of volcanic islands paralleled the current coastline in the San Diego region. The remnants of these islands stand as Mount Helix, Black Mountain, and the Jamul Mountains among others. This island arc of volcanos spewed out vast layers of tuff (volcanic ash) and breccia that have since been metamorphosed into hard rock of the Santiago Peak Volcanic formation. These fine-grained rocks provided a regionally important resource for Native American flaked stone tools.

At about the same time, a granitic and gabbroic batholith was being formed under and east of these volcanoes. This batholith was uplifted and forms the granitic rocks and outcrops of the Peninsular Range and the foothills to the west. The project area is part of this batholith and is underlain by these granitic rocks (Rogers 1992). Outcrops of granodiorite were present throughout the project area. In San Diego County the large and varied crystals of these granitic rocks provided particularly good abrasive surfaces for Native American seed processing. These outcrops were frequently used for bedrock milling of seeds. The batholith contains numerous pegmatite dikes. This was a good source of quartz, a material used by Native Americans for flaked stone tools and ceremonial purposes.

As the Peninsular Batholith rose, it warped and metamorphosed the overlying sediments, forming the Julian Schist (Remeika and Lindsay 1992). This formation contains quartzite, a material also used for Native American flaked stone tools. Its relatively poor flaking qualities made this quartzite less popular for tool making than the quartz and Santiago Peak materials.

The soils on the property include Cieneba series and acid igneous rocks (USDA 1973). The Cieneba series consists of excessively drained, very shallow to shallow coarse sandy loams that formed in material weathered in place from granitic rock. These soils are on rolling to mountainous uplands

and have slopes ranging from 5 to 75 percent. The slopes on the northern side of the project area are Cienega very rocky coarse sandy loam with 30 to 75 percent slopes. This soil is steep to very steep. It has rock outcrops on about 20 percent of the surface and very large granodioritic boulders on about 30 percent. The soil is only 5 to 15 inches deep over hard granodiorite.

The higher parts of the southern portion of the project area including is mapped as acid igneous rock land (USDA 1973). This is rough steeply sloping broken terrain. Large boulders and granitic rock outcrops cover 50 to 90 percent of the total area. Soil material between these rocks is loam to loamy course sand in texture and is very shallow over decomposed granite.

Pringle Creek is the major seasonal drainage in the region that could have provided a seasonal water source for Native Americans using the area.

The climate of the region can generally be described as Mediterranean, with cool wet winters and hot dry summers. Rainfall limits vegetation growth. Three vegetation communities adapted to the dry conditions of the area occur in the project area. These include mixed chaparral, southern coast live oak riparian woodland, and coastal sage scrub. Components of these communities provided important resources to Native Americans in the region. Sage seed, yucca, buckwheat, acorns, and native grasses formed important food resources to Late Prehistoric Native Americans.

Animal resources in the region include deer, fox, raccoon, skunk, bobcats, coyotes, rabbits, and various rodent, reptile, and bird species. Small game, dominated by rabbits, is relatively abundant.

B. Cultural Setting

Paleoindian Period

The earliest well documented prehistoric sites in southern California are identified as belonging to the Paleoindian period, which has locally been termed the San Dieguito complex/tradition. The Paleoindian period is thought to have occurred between 9,000 years ago, or earlier, and 8,000 years ago in this region. Although varying from the well-defined fluted point complexes such as clovis, the San Dieguito complex is still seen as a hunting focused economy with limited use of seed grinding technology. The economy is generally seen to focus on highly ranked resources such as large mammals and relatively high mobility which may be related to following large game. Archaeological evidence associated with this period has been found around inland dry lakes, on old terrace deposits of the California desert, and also near the coast where it was first documented at the Harris Site.

Early Archaic Period

Native Americans during the Archaic period had a generalized economy that focused on hunting and gathering. In many parts of North America, Native Americans chose to replace this economy with types based on horticulture and agriculture. Coastal southern California economies remained largely based on wild resource use until European contact (Willey and Phillips 1958). Changes in hunting

technology and other important elements of material culture have created two distinct subdivisions within the Archaic period in southern California.

The Early Archaic period is differentiated from the earlier Paleoindian period by a shift to a more generalized economy and an increased focus on the use of grinding and seed processing technology. At sites dated between approximately 8,000 and 1,500 years before present, the increased use of groundstone artifacts and atlatl dart points, along with a mixed core-based tool assemblage, identify a range of adaptations to a more diversified set of plant and animal resources. Variations of the Pinto and Elko series projectile points, large bifaces, manos and portable metates, core tools, and heavy use of marine invertebrates in coastal areas are characteristic of this period, but many coastal sites show limited use of diagnostic atlatl points. Major changes in technology within this relatively long chronological unit appear limited. Several scientists have considered changes in projectile point styles and artifact frequencies within the Early Archaic period to be indicative of population movements or units of cultural change (Moratto 1984), but these units are poorly defined locally due to poor site preservation.

Late Archaic or Late Prehistoric Period

Around 2,000 B.P., Yuman-speaking people from the eastern Colorado River region began migrating into southern California, representing what is called the Late Prehistoric Period. The Late Prehistoric Period in San Diego County is recognized archaeologically by smaller projectile points, the replacement of flexed inhumations with cremation, the introduction of ceramics, and an emphasis on inland plant food collection and processing, especially acorns (True 1966). Inland semi-sedentary villages were established along major water courses, and montane areas were seasonally occupied to exploit acorns and piñon nuts, resulting in permanent milling features on bedrock outcrops. Mortars for acorn processing increased in frequency relative to seed grinding basins. This period is known archaeologically in southern San Diego County as the Yuman (Rogers 1945) or the Cuyamaca Complex (True 1970).

The Kumeyaay (formerly referred to as Diegueño) who inhabited the southern region of San Diego County, western and central Imperial County, and northern Baja California (Almstedt 1982; Gifford 1931; Hedges 1975; Luomala 1976; Shipek 1982; Spier 1923) are the direct descendants of the early Yuman hunter-gatherers. Kumeyaay territory encompassed a large and diverse environment which included marine, foothill, mountain, and desert resource zones. Their language is a dialect of the Yuman language which is related to the large Hokan super family.

There seems to have been considerable variability in the level of social organization and settlement variance. The Kumeyaay were organized by patrilineal, patrilocal lineages that claimed prescribed territories, but did not own the resources except for some minor plants and eagle aeries (Luomala 1976; Spier 1923). Some lineages occupied procurement ranges that required considerable residential mobility, such as those in the deserts (Hicks 1963). In the mountains, some of the larger groups occupied a few large residential bases that would be occupied biannually, such as those occupied in Cuyamaca in the summer and fall, and in Guatay or Descanso during the rest of the year (Almstedt 1982; Rensch 1975). According to Spier (1923), many Eastern Kumeyaay spent the

period of time from spring through autumn in larger residential bases in the upland procurement ranges, and wintered in mixed groups in residential bases along the eastern foothills on the edge of the desert (i.e., Jacumba and Mountain Springs). This variability in settlement mobility and organization reflects the great range of environments in the territory.

Acorns were the single most important food source used by the Kumeyaay. Their villages were usually located near water, which was necessary for leaching acorn meal. Other storable resources such as mesquite or agave were equally valuable to groups inhabiting desert areas, at least during certain seasons (Hicks 1963; Shackley 1984). Seeds from grasses, manzanita, sage, sunflowers, lemonadeberry, chia and other plants were also used along with various wild greens and fruits. Deer, small game and birds were hunted and fish and marine foods were eaten. Houses were arranged in the village without apparent pattern. The houses in primary villages were conical structures covered with tule bundles, having excavated floors and central hearths. Houses constructed at the mountain camps generally lacked any excavation, probably due to the summer occupation. Other structures included sweathouses, ceremonial enclosures, ramadas and acorn granaries. The material culture included ceramic cooking and storage vessels, baskets, flaked lithic and ground stone tools, arrow shaft straighteners, stone, bone, and shell ornaments.

Hunting implements included the bow and arrow, curved throwing sticks, nets and snares. Shell and bone fishhooks, as well as nets, were used for fishing. Lithic materials including quartz and metavolcanics were commonly available throughout much of the Kumeyaay territory. Other lithic resources, such as obsidian, chert, chalcedony and steatite, occur in more localized areas and were acquired through direct procurement or exchange. Projectile points including the Cottonwood Series points and Desert Side-notched points were commonly produced.

Kumeyaay culture and society remained stable until the advent of missionization and displacement by Hispanic populations during the eighteenth century. The effects of missionization, along with the introduction of European diseases, greatly reduced the native population of southern California. By the early 1820s, California was under Mexico's rule. The establishment of ranchos under the Mexican land grant program further disrupted the way of life of the native inhabitants.

Ethnohistoric Period

The Ethnohistoric period refers to a brief period when Native American culture was initially being affected by Euroamerican culture and historical records on Native American activities were limited. When the Spanish colonists began to settle California, the project area was within the territory of a loosely integrated cultural group historically known as the Kumeyaay or Northern and Southern Diegueño because of their association with the San Diego Mission. The Kumeyaay as a whole speak a Yuman language which differentiates them from the Luiseño, who speak a Takic language to the north (Kroeber 1925). Both of these groups were hunter-gatherers with highly developed social systems. European contact introduced diseases that dramatically reduced the Native American population and helped to break down cultural institutions. The transition to a largely Euroamerican lifestyle occurred relatively rapidly in the nineteenth century.

Historic Period

Cultural activities within San Diego County between the late 1700s and the present provide a record of Native American, Spanish, Mexican, and American control, occupation, and land use. An abbreviated history of San Diego County is presented for the purpose of providing a background on the presence, chronological significance, and historical relationship of cultural resources within the county.

Native American control of the southern California region ended in the political views of western nations with Spanish colonization of the area beginning in 1769. De facto Native American control of the majority of the population of California did not end until several decades later. In southern California, Euroamerican control was firmly established by the end of the Garra uprising in the early 1850s (Phillips 1975).

The Spanish Period (1769-1821) represents a period of Euroamerican exploration and settlement. Dual military and religious contingents established the San Diego Presidio and the San Diego and San Luis Rey Missions. The Mission system used Native Americans to build a footing for greater European settlement. The Mission system also introduced horses, cattle, other agricultural goods and implements; and provided construction methods and new architectural styles. The cultural and institutional systems established by the Spanish continued beyond the year 1821, when California came under Mexican rule.

The Mexican Period (1821-1848) includes the retention of many Spanish institutions and laws. The mission system was secularized in 1834, which dispossessed many Native Americans and increased Mexican settlement. After secularization, large tracts of land were granted to individuals and families and the rancho system was established. Cattle ranching dominated other agricultural activities and the development of the hide and tallow trade with the United States increased during the early part of this period. The Pueblo of San Diego was established during this period and Native American influence and control greatly declined. The Mexican Period ended when Mexico ceded California to the United States after the Mexican-American War of 1846-48.

Soon after American control was established (1848-present), gold was discovered in California. The tremendous influx of American and Europeans that resulted quickly drowned out much of the Spanish and Mexican cultural influences and eliminated the last vestiges of de facto Native American control. Few Mexican ranchos remained intact because of land claim disputes and the homestead system increased American settlement beyond the coastal plain.

C. Prior Research

The archaeological inventory of the project area was conducted by Wade (2003). The survey included archival and other background studies in addition to a field survey of the project area. The archival research consisted of literature and record searches at local archaeological repositories, in

addition to an examination of historic maps, and historic site inventories. This information was used to identify previously recorded resources and determine the types of resources that might occur in the survey area.

During the survey by Wade (2003) adverse survey conditions were encountered that included extremely steep slopes and dense chaparral vegetation. Because impacts were not proposed for these areas it was not considered a significant detriment to the evaluation effort.

The field survey by Sue Wade (2003) identified three bedrock milling sites (CA-SDI-16,651, CA-SDI-16,652, and CA-SDI-16,653) on the level benches above the drainage. Two of these sites also included light lithic scatters (Wade 2003). These sites were recommended for avoidance with 15 m buffers. Site CA-SDI-16,651 was one of the three sites identified within the project area during the survey. This site was tested for significance and determined to not be eligible for nomination to the National Register (Pignuolo 2003). To meet project goals, sites CA-SDI-16,652 and CA-SDI-16,653 could not be avoided based on final plans and significance evaluation was needed.

III. RESEARCH DESIGN AND METHODS

A. Research Design

The goal of the testing and evaluation program was to determine if CA-SDI-16,652 and CA-SDI-16,653 qualify as eligible for nomination to the California Register and are important under CEQA and County guidelines. To accomplish this goal of evaluating the sites, background information was examined and assessed, and a testing program was conducted to determine if subsurface cultural remains are present at the sites and if they meet criteria for importance. The ability of cultural resources to address important research questions is used as a measure of site significance under Criterion D of the California Register. General research topics of chronology, subsistence, and exchange and mobility were established for this project.

The purpose of the research design is to provide criteria for evaluating the significance of the archaeological resources in the project area. This research design identified three elements of significance (integrity, Native American heritage concerns, and research potential) important for the evaluation of the prehistoric resources within the project. Each element is examined below and specific research questions and data needs are established to evaluate research potential. The information derived from archaeological testing was compared with the data needs of the research questions and, taken together with the integrity and Native American heritage concerns, was used to evaluate significance.

Integrity

Resource integrity is a critical part of evaluation. For archaeological purposes, integrity usually refers to the preservation of artifact associations and stratigraphy. Bioturbation and other natural factors affecting artifact associations are common in the San Diego region, and much of the region area has also been affected by agriculture and urban development.

Native American Heritage Concerns

Native American heritage concerns need to be included in significance evaluations as part of State policy. Native American concerns particularly focus on religious sites, sites that contain human remains, and sites with items used for religious purposes.

Research Potential

Research potential is the most applicable of the California Register criteria for archaeological resources. To establish a framework to evaluate if a sites may be likely to yield information important in prehistory or history, important research questions are established along with data needs. These research criteria are established below.

Theoretical Orientation

As a social science, archaeology seeks to understand human behavior. Because of the nature of the archaeological record, archaeologists look at behavior in terms of cultural patterns, and environmentally oriented archaeologists attempt to explain these patterns in the context of various and changing natural and social environments. While much of the past archaeological research in San Diego County has focused on reconstructing culture change over time or “culture history,” new theoretical ideas in the 1960s and 1970s highlighted the importance of the environment and shifted the emphasis of archaeology from reconstructing history to understanding culture (Binford 1989).

The fundamental theoretical orientation that underlies this study, and much of the work that has been conducted in San Diego County to date, is cultural materialism. “Cultural materialism” as used here essentially holds that practical, survival, and economic aspects of culture ultimately determine the success or the spread of specific behavior patterns (Hayden 1993). Cultural ecology and environmental archaeology are forms of cultural materialism, emphasizing the role of the environment as a practical controlling factor on culture and human behavior. The perspectives of cultural materialism and cultural ecology are appropriate for the study area because of the direct relationship between hunter-gatherer economy and the environment and because these concepts represent a continuation of recent thinking in the region. Cultural materialism is also appropriate for study of the historical archaeological resources because it focuses on relationships within systems.

Research Topics, Implications, and Data Requirements

Prehistoric Subsistence

Reconstructing the subsistence economy of prehistoric hunter-gatherers is a key question for cultural ecology. Historic period hunter-gatherers typically occupied extreme environments and/or had been heavily impacted by European colonial expansion. As a consequence, understanding the cultural adaptations of hunter-gatherers in more productive environments is heavily reliant on archaeological data.

For the most part, subsistence during the Late Prehistoric in San Diego County is fairly well understood through the ethnographic record. Ethnographic information has provided a level of detail beyond the archaeological record, but certain aspects are poorly known.

Based on the presence of bedrock milling, and the lack of marine shell on the surface of CA-SDI-16,652 and CA-SDI-16,653, it is likely subsistence was focused on inland terrestrial resources. These sites are located well beyond the ten kilometer coastal foraging radius suggested by Jones (1992).

- How does site subsistence pattern relate to resource availability and were there two divergent subsistence patterns in the Late Prehistoric?

Hypothesis: The general pattern is one of using available resources: Acorn processing subsistence technologies and small mammal procurement should dominate the assemblage. Marine resources will represent a minimal component of the assemblage.

Data Needs:

- Stratigraphic contexts that indicate the sites contain interpretable cultural strata that can be taken to represent the results of relatively short-term occupations or a single occupation that can be compared to other single occupation sites.
- Material suitable for establishing chronology from these contexts.
- Vertebrate and invertebrate faunal material, along with tools that reflect subsistence focus and activities such as projectile points, bifaces, and milling tools.
- Sufficient quantities of ecofactual material to allow patterns to be defined. To obtain a statistically valid sample, quantities of 50 items per m³ are probably required.

Chronology

Chronology and aspects of culture history have long been the subjects of archaeological research in the San Diego region. The debate over the advent of Tizon Brown Ware in western San Diego County is ongoing, although the appearance of this plain brownware ceramic is the most generally recognized chronological marker in the area (Laylander 1992). This debate continues to be evidenced in conflicts over the dividing line date between the pre-ceramic and early ceramic Late Prehistoric Period (Meighan 1954; Moriarty, III 1966; Warren 1964; May 1976, 1978), and over the geographical advent of Tizon Brown Ware within San Diego County (True et al. 1974; May 1976, 1978; Berryman 1981). For example, many investigators argue that the introduction of ceramics in western San Diego County occurred some time within the past 1,500 years (Rogers 1945; Meighan 1954; True 1986; Moriarty, III 1966), although within this group there is considerable variability. James R. Moriarty, III (1966) suggested that the earliest occurrence of pottery in western San Diego County was encountered at the Spindrifft Site (CA-SDI-39), specifically in $1,270 \pm 250$ B.P. (A.D. 680). This proposed date, however, has been challenged due to the possibility of sample contamination and deposit mixing (Warren 1964). Ronald V. May (1976, 1978), on the other hand, provided a radiocarbon date from the Cottonwood Creek site, located in the Laguna Mountains, suggesting that the appearance of ceramics occurred in 960 ± 80 years B.P. and 950 ± 80 years B.P. (A.D. 990-1000).

Another relationship between chronology and the introduction of ceramics in western San Diego County is the geographical dissemination of pottery. D.L. True et al. (1974), for example, argued that the advent of pottery in northern San Diego County (Luiseño territory) could be shifted back to as early as A.D. 1200-1300, with its first introduction from the souther Kumeyaay-Diegueño territory. An east-to-west gradient for the introduction of ceramics has been suggested by May

(1976, 1978), who argued that ceramics were lacking in sites located west of Cottonwood Creek and dated to A.D. 1300. Judy Berryman (1981), on the other hand, argues the opposite geographical trend with a radiocarbon date of A.D. 730 ± 110 from a site to the west of the mountains, suggesting that pottery actually advanced from the west to the east.

The advent of pottery and the presence of a preceramic Late Prehistoric period in western San Diego County, in terms of its timing and geographical establishment, still remains an important matter for chronologically sensitive archaeological research.

- Do CA-SDI-16,652 and CA-SDI-16,653 represent sites that were occupied during the Late Prehistoric preceramic phase and/or the Archaic Period?

Hypothesis: Only one ceramic sherd was observed during the survey of CA-SDI-16,653, it is presumed that this bedrock milling station was occupied prior to the advent of pottery in San Diego County.

Data Needs:

- Stratigraphic contexts that indicate the sites contain interpretable cultural strata that can be taken to represent the results of relatively short-term occupations or a single occupation that can be compared to other single occupation sites.
- Material suitable for radiocarbon dating from these contexts.
- Artifacts representative of activities carried out at the sites. To obtain a statistically valid sample, quantities of 50 items per m^3 are probably required.

Prehistoric Mobility and Exchange

Settlement Patterns have been the subject of considerable research in San Diego County. This topic contributes to the definition of settlement systems and the study of their change through time, both elements important to local prehistoric studies. The interaction of cultural groups and the natural landscape is an important aspect of human behavior. Just as cultural geographers study current land use patterns to aid in urban planning, the study of prehistoric settlement patterns can provide insight into past strategies of interaction with the environment.

Most settlement pattern studies focus on the relationship between natural resources and areas of human occupation. A general assumption is that important resources for subsistence create a draw for settlement, and that people will tend to locate near important water and food resources. Other types of sites may also be located near resources, but may not be related to habitation. These special task sites, such as isolated bedrock milling stations and lithic procurement/reduction areas, also provide important evidence on how people used the natural landscape.

Within the project vicinity, Pringle Creek, represents an important resource that might have created a permanent settlement draw. Based on the survey data, however, the site appears to be only a temporary campsite, and not a permanent village as would be expected based on the presence of a perennial water resource. This could, however, be explained in one of two ways: sites CA-SDI-16,652 and CA-SDI-16,653 are part of a dispersed village site with multiple other loci in the area, or there could be a better location for a village site with other important natural resources situated nearby.

An examination of resources used at a site and their source provenience is a means of examining mobility. Direct procurement, or travel over relatively large distances to procure resources is one aspect of mobility. Another aspect relates to territoriality. A seasonal round type of mobility strategy with bipolar village locations is often the model for Late Prehistoric mobility.

- How do these sites fit into the regional settlement system through time?

Hypothesis: Site patterning in relation to water, landform, and lithic resources is expected. Exchange played a very minor role in resource procurement and, although mobility provided a range of available resources at different time intervals, the sites reflect foraging and processing behavior and the local resources of the area. Roughly 90% of the assemblage will represent local materials within a 10-km foraging radius.

Data Needs:

- Stratigraphic contexts that indicate the sites contain interpretable cultural strata that can be taken to represent the results of relatively short-term occupations or a single occupation that can be compared to other single occupation sites.
- Material suitable for chronological control from these contexts.
- Artifacts representative of activities carried out at the sites. To obtain a statistically valid sample, quantities of 50 items per m³ are probably required.
- Sufficient quantities of ecofactual material to allow patterns to be defined. To obtain a statistically valid sample, quantities of 50 items per m³ are probably required.

B. Testing Methods

The goal of the testing and evaluation program was to evaluate the eligibility for the California Register of sites CA-SDI-16,652 and CA-SDI-16,653. Testing included mapping and surface collection of artifacts, and subsurface excavation to determine if a subsurface component is present.

Mr. Andrew Pigniolo conducted field testing between August 10 and 31, 2004. The previously recorded site area was initially intensively surveyed using 3 m parallel north/south transects over the site area. Any surface artifacts identified during the survey were marked with pin flags for later collection.

The site was mapped using tape and compass and each surface artifact was mapped and collected. Earlier recordation of bedrock milling was found to be essentially accurate.

A series of 10 shovel test pits (STPs) were excavated at CA-SDI-16,652 and 5 STPs were excavated at CA-SDI-16,653 to determine if subsurface deposits were present and to establish the boundaries of the site. Because subsurface deposits were not present, further testing with units was not necessary. STPs were set out in cardinal directions across the site area and adjacent to the bedrock milling features.

STPs were manually excavated circular test pits measuring 30 cm in diameter. STPs were excavated in 10 cm arbitrary, contour levels. These tests were used to determine if a subsurface deposit existed and to define site boundaries and integrity. The goal of STP placement was to test the areas within the site most likely to contain subsurface artifacts. All excavated soil was passed through 1/8-inch mesh hardware cloth and dry-screened in the field. Artifacts were removed from the screens and bagged by level.

Cultural material was separated into artifact and ecofact categories, bagged and labeled and taken to the laboratory for cleaning, analysis, and temporary curation.

A photographic record was kept to document the progress of the testing program. This included general overviews, and views of site excavation, and milling features. Color print photographs were taken during the entire testing program. A photographic log was kept to document orientation and subject matter.

Laboratory work for all cultural material was conducted by the Principal Investigator. A standard system of cataloging cultural material was used to document the cultural material recovered. All items were washed with a brush and water, except for groundstone items, which were cleaned with a dry brush. The material was then separated by material class within each level prior to cataloging.

Each artifact or group of artifacts was counted, weighed and/or measured and given consecutive catalog numbers, which were either marked directly on the artifact or on the container or bag. Each item was analyzed for specific attributes particular to that material class. The catalogue for the cultural material recovered is included in Appendix B.

IV. RESULTS

A. CA-SDI-16,652

Site Description and Testing Results

CA-SDI-16,652 was initially recorded as Robnett-2 by Wade (2003). A total of four bedrock milling features with 11 slicks were located along with 6 fragments of debitage, 1 core tool, and 1 fire-affected rock. No evidence of midden soil was noted in the dirt road or in the vicinity of the features (Wade 2003).

CA-SDI-16,652 is located on an irregular bench above and away from the south side of Pringle Creek. It is in generally very dense chaparral. A dirt access road has been brushed through the area and by the site providing visibility. The site includes both bedrock milling and associated artifacts. Surface collection resulted in the collection of 19 artifacts and fire-affected rock fragments from 17 different locations within the site (Figure 3 and Table 1).

The four bedrock milling features at the site were previously recorded and described (Wade 2003). Feature A is a smaller boulder containing a single slick approximately 178 by 88 cm in size. This feature is located on the southern end of the site. Feature B is located just northwest and contains another slick. This milling area is approximately 269 by 141 cm in size. Both these features were relocated as previously recorded. Features A and B are located in a small outcrop concentration in the southern portion of site CA-SDI-16,652. This area has been somewhat brushed in association with road clearing.

Features C and D are located in the northwestern portion of the site. They were relocated as previously recorded during the testing phase, although the north arrow was incorrect on the previous sketch map. Feature C is the southern of two large boulders. These features are level with the soil on the east side and over a meter above ground level on the west side as the slope drops. The upper side grades into the soil with a transition area of very thin soil over the rock. Feature C included 5 slicks scattered over most of the large flat surface area of the rock.

Feature D is located just north of Feature C and separated only by a small gap. Feature D has a large flat surface, but two small boulders are sitting on top of the rock. Feature D has four slicks. All of the bedrock milling elements at CA-SDI-16,652 are irregular slicks that probably represent the processing of hard seeds.

As indicated in Table 2, surface collection resulted in the recovery of a small number of artifacts. These correspond closely with the survey results, although additional fire-affected rock was recovered. Artifacts recovered during surface collection include 1 core, 9 fragments of debitage, and 3 mano fragments. All of these items were scattered among and to the west of the milling features. Although the area was more brush covered away from the road, surface visibility was good and no additional artifacts were identified on the ridge between sites CA-SDI-16,652 and CA-SDI-16,653. Surface collection resulted in the complete recovery of artifacts from site CA-SDI-16,652.

Figure 3
Site CA-SDI-16,652 Map
(Confidential figure - NOT INCLUDED)

Table 1.
Surface Collection Results

Cat#	Location	Type
CA-SDI-16652-1	#1	Cobble Fragment
CA-SDI-16652-2	#2	Debitage
CA-SDI-16652-3	#3	Debitage
CA-SDI-16652-4	#4	Fire-affected Rock
CA-SDI-16652-5	#5	Fire-affected Rock
CA-SDI-16652-6	#6	Mano
CA-SDI-16652-7	#7	Debitage
CA-SDI-16652-8	#8	Fire-affected Rock
CA-SDI-16652-9	#9	Fire-affected Rock
CA-SDI-16652-10	#10	Mano
CA-SDI-16652-11	#11	Debitage
CA-SDI-16652-12	#12	Debitage
CA-SDI-166512-13	#13	Mano
CA-SDI-16652-14	#13	Fire-affected Rock
CA-SDI-16652-15	#13	Debitage
CA-SDI-16652-16	#14	Debitage
CA-SDI-16652-17	#15	Debitage
CA-SDI-16652-18	#16	Core
CA-SDI-16652-19	#17	Debitage

Table 2.
CA-SDI-16,652 Cultural Material Summary

Material	Surface	STPs	Total	Percent
Core	1	0	1	7.7
Debitage	9	0	9	69.2
Mano	3	0	3	23.1
Total Count	13	0	13	100
Percent	100.0	0.0	100	
Fire-Affected Rock	1049.1	10.7	1059.8	100.0
Total Weight (g)	1049.1	10.7	1059.8	100
Percent	99.0	1.0	100	

Because of the isolated rural nature of the area, there was almost no recent intrusive material on the site surface and no intrusive material was collected during testing. Testing included the excavation of 10 STPs throughout the site area. As indicated on Figure 3, a series of 7 STPs were excavated in a north/south line on the east side of the two clusters of milling features. These were focused on the main area of surface artifacts. An additional line of two STPs was excavated to the west and another STP was placed west of Feature B to determine if cultural deposits were located downslope among the milling. Soils throughout the site area were generally sandy loam. STPs ranged from 20 to 40 cm in depth averaging about 25 cm. They contained medium dark gray (7 YR 4/1) sandy loam over brown (7 YR 5/2) "B" horizon soil. Both soils were over granitic bedrock DG subsoil. Some of the surface has been disturbed by brushing and the dirt road, but disturbed areas were avoided wherever possible. STP 40S/0W showed evidence of pushed soil over the natural contour.

No artifacts were recovered from the subsurface excavations at the site. Two fragments of a single possible fire-affected gabbro cobble were recovered from the 10-20 cm level of STP 20S/0W. The lack of subsurface artifacts in the STPs indicated that the site does not contain a subsurface deposit and no testing beyond STP excavation was conducted.

Artifact Analysis

The artifact identified during the survey as a core tool (SDI-16652-18) was relocated during the testing program. It is made from sparsely porphyritic Santiago Peak Volcanic material. Closer examination indicates that the artifact is a core rather than a core tool. It shows several small multidirectional flake removals. The original rock does not appear to have been much larger than the existing core because several natural spall scars still remain on its surface. Two interior fragments of debitage in the collection (SDI-16652-3 and SDI-16652-7) may be from the same core, although they could not be refitted. These were located on the surface some distance from the core (see Figure 3).

The remainder of the flaked lithic assemblage from the site consists of debitage. All of the debitage at the site appears to represent core reduction and no evidence of bifacial production was noted. At least four of the debitage fragments (SDI-16652-2, SDI-16652-11, SDI-16652-16, and SDI-16652-19) are from a black porphyritic variety of Santiago Peak Volcanic material. The material of all these items appears consistent and it is likely that they were all removed from a single core. The surface distribution of these items suggests that all the surface scatter is closely linked.

Artifact SDI-16652-17 represents a single example of a different variety of Santiago peak Volcanic material. It is green, aphanitic, and interior. Another interior Santiago peak Volcanic flake (SDI-16652-12) is patinated and appears to represent a different core.

A single flake of granite was recovered from the surface near Feature D (SDI-16652-15). This item has typical flake characteristics. The immediate area was not disturbed, but it could represent a flake from nearby brushing. The other alternative is that it represents a flake from groundstone production. Other flakes of the material were not observed.

Three mano fragments but no metate fragments were recovered from the surface of the site. All three fragments appear to represent a single unifacial cobble volcanic mano. No pecking or shaping was noted. The item appears to be fire-affected. The mano probably initially represented a tool associated with the bedrock milling at the site, but was then recycle for use as a hearth stone. No bone, shell or charcoal associated with the cultural deposit were observed at the site.

A scatter of 6 fire-affected rocks were present at the site. These weigh a total of 1058.8 grams. Most of these appear to represent subrounded gabbroic cobble fragments that could be found in the region. They appear to have been concentrated near surface collection point 3 in the northeastern portion of the site. A shallow feature may have been present in this area prior to road brushing. No subsurface features are anticipated at the site. The presence of fire-affected rock does suggest that temporary camping or cooking occurred at the site.

Summary

The four bedrock milling features and limited surface scatter suggest short-term and limited use of the CA-SDI-16,652 site area as a processing station that was occupied for a very short period of time. The presence of so few artifacts, many of which may be derived from a handful of cores, suggests very limited site use. The mano fragments indicate a direct link between the artifact scatter and the bedrock milling. Fire-affected rock indicates cooking or heating activity. A lack of subsurface artifacts and the small number of surface artifacts indicate that this site has limited additional research potential.

B. CA-SDI-16,653

Site Description and Testing Results

CA-SDI-16,653 was initially recorded as Robnett-3 by Wade (2003). A single bedrock milling feature and associated potsherd were identified during the survey. No evidence of midden soil was noted in the dirt road or in the vicinity of the feature.

This site is located on the south edge of a small dirt road approximately 40 m east southeast of CA-SDI-16,653. The site was relocated during the testing program as originally recorded. Bedrock milling Feature A was located just above the road and contains two small slicks. The site surface and adjacent areas were carefully surveyed, but only the single ceramic sherd that had been previously identified was relocated. Although adjacent brush was dense, surface visibility was good and additional cultural material was observed.

Testing included the excavation of 5 STPs (Figure 4). Four STPs were excavated in cardinal directions around the bedrock milling feature. The remaining STP was excavated 2 meters east of the center of the feature to ensure that artifacts were not located in intact soils just below the feature. The clearing and brushing associated with the dirt road adjacent to the feature resulted in a small cut below the feature and fill to the east. STPs were placed in the least disturbed locations possible.

None of the STPs excavated at CA-SDI-16,653 recovered cultural material. Soils were consistent with those at nearby site CA-SDI-16,652 reaching a depth of approximately 30 cm. The single artifact recovered from the site (SDI-16653-1) is a Tizon Brown Ware body sherd fragment. It shows a break along a coil and granitic inclusions.

Tizon Brown Ware is made from residual clays with granitic inclusions. It is the typical Native American pottery produced in western San Diego County. Tizon Brown Ware was made using the paddle-and-anvil technique. Pottery is directly associated with the Late Prehistoric period and shows the use of storage and or cooking containers at the site.

CA-SDI-16,653 appears to represent a small bedrock milling station that was probably associated with the activity at nearby sites CA-SDI-16,651 and CA-SDI-16,652. The limited size and use of the site suggests short term use.

Figure 4
Site CA-SDI-16,653 Map
(Confidential figure - NOT INCLUDED)

V. EVALUATION CRITERIA, SIGNIFICANCE, AND RECOMMENDATIONS

A. Evaluation Criteria

The evaluation criteria used to determine site significance are provided below.

Cultural resource investigations must comply with a variety of laws, regulations, and ordinances. Many of these laws are complementary and provide similar protection for cultural resources at various jurisdictional levels.

The importance of cultural resources under State law as defined in CEQA has been refined to coincide with those of the California Register. Section 15064.5 of the CEQA guidelines provides for closer consistency with the National Register criteria. “Historical resources” as defined by Section 15064.5 of CEQA include:

(1) A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (Pub. Res. Code SS5024.1, Title 14 CCR, Section 4850 et seq.).

(2) A resource included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.

(3) Any object, building, structure, site, area, place, record or manuscript which a lead agency determines to be historically significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency’s determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be “historically” significant” if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code SS5024.1, Title 14 CCR, Section 4852) including the following:

(A) Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;

(B) Is associated with the lives of persons important in our past;

(C) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or

(D) Has yielded, or may be likely to yield, information important in prehistory or history.

(4) The fact that a resource is not listed in, or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources (pursuant to section 5020.1(k) of the Public Resources Code), or identified in an historical resources survey (meeting the criteria in section 5024.1(g) of the Public Resource Code) does not preclude a lead agency from determining that the resource may be an historical resource as defined in Public Resource Code sections 5020.1(j) or 5024.1.

California Register Criteria (a), (b), and (c) are unlikely to be met by prehistoric sites within the Robnett project because they most often apply to standing structures or resources with good historical documentation. Criterion (d) is the most applicable to prehistoric archaeological resources and historical resources with no architectural integrity and limited historical association.

The problem of establishing the research value of archaeological data at the State, and local level has been addressed by numerous archaeologists and cultural resource managers. A consensus had developed that emphasizes the development of a problem-oriented research design that ties explicit research questions to larger order research issues in anthropology, history, and other social sciences. The research design provided in Section III establishes specific criteria for evaluating the importance of site information. These research criteria can provide information that will provide public benefit by expanding our understanding of history and prehistory.

In addition to the significance criteria defined above, the County of San Diego Resource Protection Ordinance defines significant prehistoric or historic sites as a:

Location of past intense human occupation where buried deposits can provide information regarding important scientific research questions about prehistoric or historic activities that have scientific, religious, or other ethnic value of local, regional, state, or federal importance. Such locations shall include, but not be limited to: any prehistoric or historic district, site, interrelated collection of features or artifacts, building, structure, or object included in or eligible for inclusion in the National Register of Historic Places or the State Landmark Register; or included or eligible for inclusion, but not previously rejected for the San Diego County Historic Site Board List; any are of past human occupation located on public or private land where important prehistoric or historic activities and/or events occurred; and any location of past or current sacred religious or ceremonial observances protected under Public Law 95-341, the American Indian Religious Freedom Act or Public Resources Code Section 5097.9, such as burial(s), pictographs, petroglyph, solstice observatory sites, sacred shrines, religious ground figures, and natural rocks or places which are of ritual, ceremonial, or sacred value to any prehistoric or historic ethnic group.

The relationship between RPO and CEQA significance is not clearly defined, but RPO significant cultural resources are described as “unique” in RPO and are generally considered to be at a higher level of significance than the thresholds set by CEQA. RPO significant resources are most often

considered to be resources of both scientific and religious or ethnic significance, such as archaeological resources with human remains or rock art.

B. Significance

The goal of the project was to test and evaluate sites CA-SDI-16,652 and CA-SDI-16,653 for California Register of Historical Resources (California Register) eligibility and significance under the County RPO. Testing included mapping, surface collection, and the excavation of 15 STPs. Surface conditions and subsurface testing indicated that subsurface components are not present and that artifact assemblages at both sites are very limited in quantity and diversity.

Sites CA-SDI-16,652 and CA-SDI-16,653 not contain datable material, or the quantities of tools, and faunal material necessary to address the questions identified in the research design. Sites CA-SDI-16,652 and CA-SDI-16,653 lack the integrity and data necessary to qualify as eligible for nomination to the California Register under Criterion D. Sites CA-SDI-16,652 and CA-SDI-16,653 also lack qualities that would make them eligible for significance under the County RPO.

C. Management Recommendations

Testing has evaluated CA-SDI-16,652 and CA-SDI-16,653 for California Register eligibility and significance under the County RPO. Both sites CA-SDI-16,652 and CA-SDI-16,653 lack the integrity and content needed to qualify as important and significant under these criteria. Figure 5 indicates that these two sites, in addition to previously evaluated site CA-SDI-16,651, will be directly impacted by the proposed project. Because these resources do not qualify as significant, no impacts to CEQA or RPO significant cultural resources will result from the proposed project. No further work is necessary to address these resources.

Figure 5

Archaeological Sites and Tentative Parcel Map

(Confidential figure - NOT INCLUDED)

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